CHAPTER FIVE

BACKWOODS RECREATION

Camping and hiking are typical backwoods activities. Mountain climbing and hunting, similarly, are included among the activities presented in this chapter.

Activities similar to hiking such as walking for pleasure and nature walks also receive relatively high factor loadings for this group of activities, as is shown in table 4, appendix A. Negative weights are assigned to driving for pleasure and attending outdoor sports events—signifying that persons who are typical backwoods sportsmen tend to shun these forms of recreation.

Neither hunting nor mountain climbing were included in the factor analysis presented in appendix A, because neither of these activities had a sufficiently high level of activity for the summer.

The backwoods score is not highly predictable from personal characteristics. According to table 12, appendix A, the amount of the variance accounted by background characteristics varies from a low of 4 percent for females in the South to 20 percent among males in the West. (See, also appendix A, table 10.)

Age provides the most dependable basis for estimating the backwoods score. Income also contributes significantly. Other factors of minor significance are urbanization, the presence of children, and the nonwork status of head of household. The high weight given to camping is also reflected in the moderate rate for bicycling and for sightseeing—the one because of the youthful nature of campers and the other because of the utility of camping in traveling.

Camping is already increasing faster than the sites for camping can be provided. Even camping in remote and undeveloped areas is extensive. Increases in camping will most certainly accompany increases in travel, for camping makes it possible for families to enjoy weekends and vacations economically far from home. Camping facilitates other outdoor activities, such as fishing and hunting. When resources are developed for such purposes, facilities for camping should be included, also. The Survey Research Center study showed that about one-third of the campers enjoy camping in remote areas removed from other people, while about the same proportion enjoy camping in an area where they can visit and talk with other campers. 1/ Consequently, both types of camping areas are needed.

Further increases in camping rest upon the answer to the question, "Camping for what?" After camping for sightseeing and travel and camping for fishing and hunting, other interests must be introduced into the camping pattern in order to make it a creative and challenging aspect of outdoor recreation. There are many such interests served by living close to nature in a new and stimulating locale for brief periods of time: photography, art and sketching, collecting plants and mineral specimens, visits to historical locales. Group camping with portable equipment provides a basis for groups and organizations to isolate themselves for brief periods. Such isolation serves to intensify interaction and communication and to achieve goals gained through group integration or through other learning experiences.

Hiking on trails with a pack is closely related to camping and requires only trails and occasional shelters. The construction of trails in parks needs to be accompanied by stimulation of their use by trail clubs. Mountain climbing with gear is a logical extension of hiking; an increase in this activity can be expected only from the more vigorous hiker.

CAMPING

The population camped 0.86 days per person during 1960-61. About one-half of these camping days were spent during the summer, and about one-fourth in the fall. Over the year, there is a much higher rate of camping in the West (2 days per person) than in other areas. The South is second (0.79 days). This regional variation is consistent with the weather, and the lower rates by season for the Northeast and North Central suggest the effect of climate upon participation (tables 1.01, 2.01, 3.01, and 4.01). Altogether there were approximately 113 million camping days during the 12 month period, June 1960 - May 1961.

Among outdoor land-related activities, camping during June - August 1960, was engaged in by 8 percent of the population. An estimated 10,440,000 persons 12 years of age and above camped one or more times during June - August 1960. For the United States during this period, the average camping days per person was 0.46 (table 1.02.06).

On the average, residents of the West camp nearly three times the rate of other regions, with the Northeast area camping somewhat less than the others (table 1.02.06).

Males participate in camping at rates greater than females: about one and a half times more for the United States, and up to two times more in the South. For the United States as a whole, this relationship holds for each age group, except the 25-44 year group. Females of these ages camp at higher rates than males in each region, except the South, where the male rate is three times greater. Evidently, camping is less family oriented in the South (table 1.02.06).

The youngest age-sex groups camp more frequently than others, and the rate declines to very low rates for the 65 years and older group, except for males 45 to 64 years living in the west (2.11).

Camping and income are directly related, each higher income group participating at rates greater than the preceding, except for the highest income class ($15,000 and over). This relationship generally holds within

1/ Eva Mueller and Gerald Gurin, "Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults," ORRRC Report 20, chapter 6.

each region, although there are minor variations. In the South and Northeast, for example, participation reaches its peak with the $8,000 to $9,999 income class, compared with the peak in the next higher income class for the North Central and West regions (table 1.02.06).

Among those 25 years and older, the rate of camping increases with education to the group who finished high school, then declines. There are some variations in this pattern by region, the most outstanding being the North Central States where the peak group is the college graduate. Participation in the West varies with education more than other regions.

Nonwhites camp very little compared with whites. The nonwhite in the West camps more than any other nonwhite group, but his rate is only about half the white. Both nonwhite males and females participate less frequently than the corresponding white sex group, but the nonwhite female rate is quite low when compared both with nonwhite males and white females (table 1.03.06).

The rural resident camps more per person than the urban in the West (1.05 to 0.48 days) and the Northeast (0.33 to 0.27 days). Highest participation rates obtain among the rural nonfarm residents of the West. While the rural resident participates more in camping than the United States urbanite (0.59 to 0.36 days), this pattern is by no means uniform within each region. The North Central States, notably, deviate from it, partly because of the low rates for the rural population outside of SMA's. However, not only region, but also income and age appear to contribute to the explanation of differences in camping rates among residence groups (table 1.02.06).

The explanation may lie in differences in the purpose of camping, which perhaps grows out of one's residential environment. In urban places 50,000 to 1 million population, and rural areas, both male and female teenagers participate more frequently than other age groups. This is true, also, for males but not females living in very large cities. In smaller cities, the 18-24 year olds participate more heavily. Most probably the latter camps to hunt and fish and the former for Boy and Girl Scout or other youth activities (table 1.03.06).

The highest number of days per person within SMA's is the $8,000 to $9,999 income group, and is one income group higher for the small urban and rural populations. Camping holds much less attraction for the group earning $10,000 or over who live in urban areas over 1 million population, perhaps reflecting the barrier of distance and the attractiveness of other nearby forms of recreation.

Generally, those with no impairments camp slightly more frequently than those with impairments, but the relationship is not consistent for the several age groups. In fact, for the 18-44 age group, the rate for those with limiting impairments is 0.61 compared with 0.44 for those with no impairments (table 1.04.06).

The camping days per person is directly related to the respondent's report on the state of his health for teenagers and young adults. However, this pattern is not repeated for older males. State of health has little influence upon participation rate for the male, but has a distinct effect upon participation among older females. Camping with automobiles, trailers, conveniences at campsites, etc., is attractive, even to older males (45-64 years) in poor health. Older females, however, if in poor health, are not attracted to camping.

The employed population, generally, camps at the same rate as the nonlabor force population (the former including only employed persons 14 years of age and over). This is also true of the rural population. However, within urban areas, the employed camp slightly more who live in cities of over a million, but employed persons residing in other urban areas camp less than the nonlabor force population 12 years and older (table 1.03.06). See accompanying table 6.

Table 6. Camping days per person for the labor force (14 years and over) and the nonlabor force (12 years and over) by size of place of residence, June-August 1960

National Recreation Survey

	All	Urban in SMS		Urban not in SMA	Rural in and out of SMA
		Over 1 million	Under 1 million		
Labor force....	0.45	0.38	0.41	0.26	0.58
Nonlabor force	.47	.22	.59	.48	.59

Source: Table 1.03.06.

Professional and technical workers and craftsmen, foremen and kindred workers participate more in camping than other occupational groups. The higher participation of these two groups in the large cities contributes to the excess of camping participation observed above. These two groups also fish at relatively high rates. Managers, officials and proprietors, except farm, participate at rates about as low or lower than any other occupational group in each residence class. Occupation is associated with participation less in the West and Northeast than in other regions (tables 1.02.06 and 1.03.06).

Camping preferences

Camping ranks ninth in the preference order, and holds a comparable rank to boating, hunting, walking for pleasure, and attending outdoor sports events. Preference in terms of time available indicates that camping is preferred for a weekend trip or on a vacation by 4 and 3 percent, respectively, of the population (table 1.21).

By region, a general preference for camping is much greater in the West (24 percent) than other regions (6 to 10 percent). Each size of place of residence class in the West presents a higher general preference for camping than comparable areas in other regions, the highest percentage being rural residents in the West (35 percent). Males (12 percent) express slightly higher preference for camping than females (9 percent), but differences between sexes by age are slight (table 1.17). Vacation and weekend preferences for camping vary little by size of place of residence or age-sex (tables 1.22 and 1.25).

Participation in camping is more strongly associated with preference for water activities and hunting than with other types of outdoor recreation.

Participation in camping is negatively associated with a preference for other passive activities, such as driving for pleasure, sightseeing, and attending outdoor sports events, and milder outdoor activities, such as picnicking and walking for pleasure (table 1.12). As is shown below, camping is more highly associated with participation in water activities than with other types of outdoor activity. It has very little association with some of the activities more popular with urban people. Below is presented the correlation coefficient (summer 1960, data) of participation in selected activities with camping participation. 2/

Hiking	0.28
Fishing	.21
Boating	.22
Swimming	.21
Water skiing	.21
Horseback riding	.09
Attending outdoor sports events	.08
Walking for pleasure	.06

From this it is clear that nothing would please campers more than to camp beside a lake to enjoy the associated pleasures of fishing, boating, swimming, etc.

Twenty-three percent of those who prefer camping participate as often as they would like (table 1.14B). Time is by far the most frequently mentioned reason for not participating more often, 47 percent of those who prefer camping so indicating. Only 10 percent mention financial restrictions. Slightly more of the group earning less than $3,000 (67 percent), indicate the time-money restriction than do other income classes, and fewer in this income class participate as often as they would like (table 1.13). Consequently, financial restrictions may impede camping in the lower income class.

Tent ownership

Ownership of tents is much more prevalent in the West, 14 percent so reporting, than in other regions. The South stands lowest, with 3 percent reporting tents large enough to stand in. The percentage reporting tents increases with income, from 2.5 percent for the less than $4,500 income group to 8 percent for the $4,500 to $9,999 class, and 13 percent for the highest income class. Vacation trailers are reported by about 1 percent of the population (table 5.48).

Camping appeals partly because it is a different way to live. In the wilderness study, reasons for wilderness camping most frequently mentioned were to get away from civilization, and to observe nature. 3/ These two reasons were also the most frequently quoted reasons for "liking to rough it" among approximately 1,000 respondents who said that they preferred to "rough it" during a vacation in preference to enjoying comfort. 4/ Other reasons for camping which have been reported in studies include esthetic-religious reasons, for health, sport, or play, and for socialability, or to respond to the pioneer spirit. 5/ To this might be added the economic reason, since to some a camping vacation enables the family to travel and see the country which otherwise would be prohibited by costs.

Camping is most appropriately engaged in on a weekend or vacation. Some minimum income level is required for a person to possess the tent, vehicle, and other paraphernalia necessary to camp. In addition, a variety of skills is required from cooking to woodcraft, and one undoubtedly improves upon these skills as one camps more frequently. In particular, whether one travels by automobile, with mule pack, or with back pack, determines the type of equipment and the type of skills which come into play on a camping outing. The physical activity involved, similarly, will vary with these factors, camping by automobile being the most moderate, physically. There probably is low status achievement through camping participation, although this probably is higher among younger age groups.

Camping in "undeveloped" areas

In developing its plans, the Commission recognized the need for information on the extent of camping in undeveloped and remote areas. Although it was not included in the National Recreation Survey summer questionnaire, the question was asked of campers on each subsequent survey. 6/ Thirty-three percent of the campers reported camping in "undeveloped areas" only and 2 percent reported camping in both types of areas. Consequently, 35 percent of all campers reported some camping in areas other than developed areas.

A precaution may be helpful in interpreting this. The percentage of campers who camped in "undeveloped areas" is not the same as the percentage of camping days spent in these areas. Our data do not show the latter. Finally, the fact that the campers who were questioned were fall-winter-spring campers rather than summer campers may bear upon the results. Slightly more than half of all camping days occur during the summer.

2/ See appendix A, table 3c.

3/ "Wilderness and Recreation—A Report on Resources, Values and Problems," ORRRC Study Report 3.

4/ Eva Mueller and Gerald Gurin, with the assistance of Margaret Wood, "Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults," ORRRC Study Report 20.

5/ Gregory P. Stone and Marvin J. Taves, "Camping in the Wilderness", in Eric Larrabee and Rolf Meyersohn, "Mass Leisure," Glencoe, Ill.: The Free Press, 1958, pp. 290-305.

6/ The question determined whether camping had been "in developed areas" or "in wilderness or remote areas". The latter is identified as "undeveloped areas" in the above report to avoid misinterpretation with camping in areas officially designated as wilderness. Wilderness was defined to the interviewer as "an area not accessible by improved roads and without developed campsites." This definition is more general than those used by such Federal agencies as the National Forest Service or the National Park Service. Consequently, the percentage reporting camping in undeveloped areas may appear to be high in relation to the numbers camping in officially designated wilderness areas. For a further discussion of the terms, see "Wilderness and Recreation—A Report on Resources, Values, and Problems," ORRRC Study Report 3, chs. 1 and 4.

Those who had camped in "undeveloped" areas were asked, "For the type (kind) of camping you were doing, were the places where you camped or planned to camp crowded? That is, were too many people there?" Nine percent of the campers in undeveloped areas said, "yes". Thus, crowding in undeveloped areas during fall, winter, and spring does not appear to be a problem. Those responding "yes" were also asked, "Did the presence of these people cause you to change your camping plans in any important way?" Only 4 percent of all campers in "undeveloped" areas said, "yes." Below is shown the percent of campers who report camping in undeveloped areas and the percent changing plans because of crowding during fall, winter, and spring, 1960-61, (three surveys combined).

Total percent	100
Camped developed area only	65
Camped undeveloped area only	33
Camped both	2
Total undeveloped area campers	100
Undeveloped area campers reporting area not crowded	91
Undeveloped area campers reporting area crowded	9
Undeveloped area campers reporting area crowded but did not change plans because of crowd	5
. . . changed plans because of crowd	4

HIKING

Hiking is chiefly a summer activity. More than half of all hiking days for the year (June 1960-May 1961) (0.42 days per person) occur during the summer. Only 0.16 days per person occur during other seasons. Hiking in the West (0.72 annually) is about twice greater than hiking days per person in other regions. This is primarily due to the unusually high rate of hiking in the summer, but also partly from heavier hiking in the fall in the West (0.16). (See tables 1.01, 2.01, 3.01, and 4.01.)

Only 6 percent of the population went hiking one or more times during the summer 1960. The population 12 years of age and over hiked at about the same rate as it went water skiing or attended outdoor concerts. This was 0.26 occasions per person for the summer (table 1.02.09).

Our definition of hiking required that it be along trails with a pack, thereby distinguishing it from walking for pleasure, mountain climbing, and nature walks.

With this specialized definition of hiking, we find that slightly more than half of the hiking occasions engaged in during the summer 1960 by the population 12 years of age and over were by boys or girls 12 to 17 years. This group alone hiked more than 17 million days (or part days) during June-August 1960.

Boys of these ages hiked an average of 1.4 times during the summer, compared with 0.41 for girls. These are the peak participation rates within each sex group (table 1.02.09).

The people in the West hiked approximately 0.5 occasions per person during the summer, which is twice the national rate. Conversely, the people of the South (0.17 occasion per person) hiked less than other regions. The 12 to 17 year old males are the most active hikers in each region. The rates are quite low for the male population to age 45, except in the West where the rates for males are higher, age by age. The retired Northeasterner, aged 65 and over, also hikes frequently, approximately 0.97 occasions during the summer. The rates by age and region for females are lower and less stable. In general, younger females engage more heavily than other females (table 1.02.09).

This general age-sex pattern is repeated when age and sex are considered by size of place of residence. The small urban place (less than 50,000) shows slightly higher participation rates than other size of place of residence classes, and part of this is due to heavier participation among males 65 and over who live in these communities and to young females (18-24 years). Other than this, the young male, irrespective of place of residence, is the principal hiker (table 1.03.09).

Hiking and income

Although hiking cannot be considered an expensive outdoor activity, the rate of participation, nevertheless, is associated with income. The rate increases from almost no participation among the class receiving less than $1,500 annually per family to 0.68 occasions per person during the summer among the group earning $10,000 to $15,000 per family. Participation falls off for the highest income class. This pattern also characterizes the four regions, except for a small variation in the West and for a "peak" reached with the $8,000 to $9,999 income group in the North central region. In the West, there is heavier participation in the lower third of the income classes, than is characteristic of other regions (table 1.02.09).

Interesting variations appear when one considers income by size of place of residence. In the very large cities, there is heaviest participation in the $8,000 to $9,999 family income group, but also relatively heavy participation in the $3,000 to $4,499 class and the top income class. In cities 50,000 to a million, the $10,000 to $14,999 family income class hikes at higher rates and, conversely, there is practically no hiking among the $3,000 to $4,499 income class. The latter group, however, participates relatively heavily in the small cities (less than 50,000 population), but the heaviest participation in this size community is among families earning $10,000 to $14,999 annually. The $8,000 to $14,999 income group participates more heavily in rural areas. This inconsistent pattern of income in relation to hiking participation evidently reflects variations in organizational membership of 12 to 17 year olds according to economic status of the family. One would suspect that there is greater effort in the very large cities to encourage affiliations with organizations which include hiking as part of their program, as contrasted with the cities under 1 million (50,000 to 1 million). In small cities, on the other hand (under 50,000), such organizational affiliation is chiefly within the upper middle classes, although the lower income groups also participate. The survey does not provide evidence that occasions were sponsored by organizations, but

observation at locations suggests that much trail hiking is enjoyed by either organized groups, or families plus friends 7/ (table 1.03.09).

When size of place of residence is considered by region, the relationships previously mentioned hold up. In the West the populations in standard metropolitan areas participate more heavily than other residence groups. In the Northeast, however, participation is heaviest among small city populations. In the South the participation level is low for all size of place of residence classes (table 1.02.09).

Putting youth aside for the moment, let us consider the hiking participation among those aged 25 or more according to years of education. The participation rate increases with each educational level, from zero for those who only have had up to 4 years of schooling to 0.62 occasions per person during the summer for those who finished college or more. This pattern characterizes the Northeast and the West, but is not typical of the North Central region nor the South. One would suspect that these well-educated hikers in the Northeast and West also are in the higher income brackets. The absence of such association in the North Central States and the South is partly accounted for by the low participation rates in these two areas (table 1.02.09).

The white population (on the average) hikes more than four times as frequently as the nonwhite (0.28 compared with 0.06 days per person during the summer). This relationship is fairly consistent across regions, and for each size of place of residence class. Among nonwhites both male and female rates are uniformly low. White female rates are slightly less than male rates for each size of place of residence class, but differences are not great. The overall difference between white male and white female is 0.35 to 0.21, while comparable nonwhite rates are 0.07 and 0.05 (tables 1.02.09 and 1.03.09).

Among employed persons 14 years of age and over, only the professional, technical and the white-collar group participate to any appreciable extent. Together these groups account for 65 percent of all hiking among employed persons 14 years of age and over. These two occupational groups stand out, also, when we consider region or size of place of residence (tables 1.02.09 and 1.03.09).

Hiking participation is closely associated with one's reported state of health, only those reporting excellent or good health participating to any appreciable extent. This generally holds for each age and sex group (table 1.04.09).

Hiking is fairly strenuous and those with limiting impairments hike very little. On the other hand, the rate for those whose impairments are not limiting is about the same as the rate among those who have no impairments (table 1.04.09).

Hiking preferences

Hiking is quite low in the preference order for outdoor activities, only 3 percent listing "some" preference for hiking. The degree of preference increases with more frequent participation in hiking for such active recreations as swimming, camping, horseback riding, and bicycling. These are vigorous activities, characteristic of youth (table 1.12).

One-third of those who prefer hiking are able to hike as frequently as they would like. Another one-third of those who prefer hiking do not engage as often as they would like because of insufficient available time. Another 12 percent are restricted because facilities are not immediately available. Restrictions due to financial ability are insignificant. Females who prefer hiking mention more often than males the unavailability of paths and other facilities, but both mention the time restriction about equally (table 1.14).

For the adult population, the association of hiking with income, with professional and white-collar occupations, and with education, suggests that the older hikers are a fairly well-identified group. But hiking is not generally popular throughout the adult population.

Hiking in the United States does not have the appeal that it has in Europe. Our youth (12 through 17 years) are the principal hikers. With a pack, it becomes a strenuous activity, and to engage requires considerable physical effort. Among those who have tried hiking but did not like it, more than half say it is too strenuous for them.

One may hike on trails with a pack for brief periods of leisure time, provided one is proximate to open country with trails. In such cases the exertion need not be great. More typically, however, our urban population must travel from home to the open country site before beginning a hike along a trail. Consequently, his trek may be overnight or longer, and the physical activity may be quite strenuous. In either case, little income outlay is involved, the chief requirement being available leisure time. The requisite knowledge and skill are not difficult to acquire: walking skills of normal persons need only be augmented by knowledge of safety precautions and attention to bodily comforts—experience easily acquired from companions. More important a requirement than skill, however, is an interest in hiking, and obviously the physical challenge it offers appeals to the young male or female more than other groups. The level of status achieved through hiking is generally low, perhaps, for most of our population segments. There may be considerable notoriety attached to unusually long or hazardous hikes, such as a trek across continental United States. Among some age groups, such as adolescents, there may be considerable status accruing to one who hikes 20 miles a day, say, or traverses an unusually rough terrain. Except for such cases, status as a motivational factor is insignificant, perhaps, when compared with the motivations associated with the physical activity of movement, of seeing new and varied scenes from

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7/ For example, the fourth ranking "activity most enjoyed" by various types of groups surveyed at recreation sites was "trail hiking" among "family plus friends or relatives" and among "organized groups (troop, team, club)". See: Leslie M. Reid, James H. Hall, and Raleigh Barlowe, "The Quality of Outdoor Recreation Areas as Evidenced by User Satisfaction." ORRRC Study Report 5. Washington: Outdoor Recreation Resources Review Commission, 1962. See especially table 22, and app. IV, table 6. Among organized groups, picnicking, swimming, and camping preceded trail hiking in the preference order.

heights achieved on foot, and from satisfactions resulting from fellowship and personal encounters along the trail. Hiking with a particular purpose in view, such as to collect specimens or to reach an unusually stimulating locale, becomes a genuine learning experience. Whether such experiences are capable of continuously contributing to learning depends upon the individual. Certainly, hiking is more frequently a group than a solitary activity, and the group feature of the activity has made it a favorite outing experience for young people's organizations, study groups, etc. Perhaps programs to increase the frequency of hiking should be directed at organizations, particularly young people's groups, and should emphasize physical satisfactions, fellowship, and the creation of learning experiences. Individual facilities may appropriately emphasize particular physical features (a peak, a waterfall, a mine, a historical site, etc.) or nature objects for collecting.

MOUNTAIN CLIMBING

Approximately 1 percent of the population 12 years of age and over engages in mountain climbing during the summer months. An estimated 12 million occasions occurred during the 12-month period (June 1960-May 1961, inclusive). This is approximately 0.09 occasions per person, a very low participation rate compared with other outdoor activities. Mountain climbing is engaged in slightly more than snow skiing but slightly less than sailing over a 12-month period (tables 1.01, 2.01, 3.01, and 4.01).

The rate during the summer and spring is about the same (0.04 and 0.03, respectively), but is lower during fall and winter (0.01).

The annual rate is greater in the South (0.14) than other regions: West (0.09), Northeast (0.08) and North Central (0.05). The Northeast participates more frequently in the summer than in other seasons, whereas the South participates more frequently in the spring. Participation in the West is greater in the summer and fall. These variations by region by season evidently reflect climatic differences.

These data do not provide sufficient frequencies for analysis of the characteristics of participants. Neither do preferences provide adequate data for analysis. Perhaps those who climb mountains are more vigorous hikers, and the demographic characteristics of hikers may be considered the best estimates of characteristics of mountain climbers.

HUNTING

Hunting is engaged in over the year at a rate of 1.86 days per person. These are chiefly in fall and winter. The rate for fall 1960, was 0.73 and for the following winter 0.80. Because of the similarity in rate for these two seasons, and because the rate is low for analytical purposes, it is useful to combine fall and winter rates. This is done in the accompanying table. The discussion below concerns the 6-month period September 1, 1960, to February 28, 1961. In addition to these half-year rates, participation amounts to only 0.33 occasions per person during the remaining 6 months. Part II of this report contains tables for each of the seasons (tables 1.02.11, 2.02.11, 3.02.11, 4.02.11, and others).

The National Survey of Fishing and Hunting provides evidence of a slight increase in hunting days per person between 1955 and 1960. The difference between the National Survey of Fishing and Hunting 1960 estimate and the National Recreation Survey estimate for 1960-61 is due to differences in definition of a hunter, as is explained in the Appendix B of this report. Hunting was found to occur among the population 12 years of age and over, as follows: 8/

1955 "times" per person (NSHF)	1.20
1960 days per person (NSHF)	1.47
1960-61 days per person (NRS)	1.86

There are about two times more hunting days per person in the South than in the Northeast and West, the days per person for the 6-month period in the South being 2.04. The rate for the North Central region is 1.58.

Hunting is almost exclusively a male recreation. Females during this 6-month period participated only 0.18 occasions per person compared with 3.02 for males. The female rate is uniformly low throughout the regions, but is somewhat higher among females aged 18 to 24 years living in the North Central States than among other age groups. (See accompanying Table 7.)

Among males the rate declines with age, from 5.31 occasions per person for the 12-17 year age group to 1.11 occasions per person for those 65 years and over. The decrease is fairly uniform with advancing age.

The number of days hunting per person is indirectly associated with size of place of residence. As residence becomes more rural, hunting rates increase. For example, for the Nation as a whole the days per person for residents of urban places of over 1 million was 0.25. This rate increased successively for each size of place of residence class, reaching 4.43 days per person for the rural farm population outside standard metropolitan areas. 9/ This association with the urban-rural continuum is fairly consistent for each region.

The age and sex rates by urbanization show the depressing effect of urban living upon the hunting participation of younger males (12 to 17 years). On the other hand, those living in urban places less than 50,000 show a pattern of hunting participation which generally decreases with age. This, also, is true for rural territory, except that there is little decrease between the first and second age classes,

8/Source: 1. Estimated from table 8, p. 59 (1955), "National Survey of Hunters and Fishermen." The open end class was estimated from NRS data to have a midpoint of 61.4. Population was estimated at 125,536,000.

2. From table 13, "1960 National Survey of Fishing and Hunting."

3. From tables 1.01, 2.01, 3.01, and 4.01, National Recreation Survey.

9/The urban-rural continuum was assumed to be as follows: in SMA, urban, over 1 million; in SMA, urban, under 1 million; not in SMA, urban; in SMA, rural; not in SMA, rural nonfarm; not in SMA, rural, farm. This sequence is also used in the essay by Philip M. Hauser, "Demographic and Ecological Changes as Factors in Outdoor Recreation," in ORRRC Study Report 22, "Trends in American Living and Outdoor Recreation."

Table 7. Hunting days per person by socioeconomic characteristics for region and size of place of residence September-November 1960 combined with December 1960-February 1961

Socio-economic characteristic	Days per person									
	United States	Northeast	North Central	South	West	All	SMA Over 1 million	SMA Under 1 million	Urban, not in SMA	Rural in and out of SMA
All classes	1.53	1.03	1.58	2.04	1.09	1.53	0.25	0.83	1.16	2.87
Male (age in years)	3.02	2.28	2.97	3.91	2.08	3.02	.52	1.66	2.38	5.41
12-17	5.31	5.70	5.59	5.56	3.05	5.31	.22	1.94	5.45	8.84
18-24	4.23	3.08	3.78	6.24	1.48	4.23	1.07	1.75	(1/)	8.18
25-44	3.01	1.82	3.08	3.57	3.17	3.01	.54	2.37	2.84	4.86
45-64	2.04	1.56	1.77	3.10	.94	2.04	.53	1.04	1.21	3.87
65 and over	1.11	.13	1.60	1.69	.66	1.11	.08	.48	.33	2.47
Female (age in years)	.18	2/.03	.29	.20	.21	.18	2/.02	.09	2/.17	.36
12-17	.19	2/.03	.38	.19	.08	.19	2/.01	2/.03	2/.15	.39
18-24	.22	(2/)	.47	.10	2/.38	.22	(2/)	.31	(1/)	.36
25-44	.23	2/.08	.25	.31	.22	.23	2/.04	.13	2/.10	.43
45-64	.19	(2/)	.34	.22	2/.28	.19	(2/)	2/.01	2/.35	.39
65 and over	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
Residence in SMA	.88	.54	1.07	1.37	.51					
Urban: over 1 million	.25	.13	.44	.27	.29					
Urban: under 1 million	.83	.58	.72	1.07	.72					
Rural	2.13	2.28	3.43	2.06	.41					
Not in SMA	2.60	3.14	2.31	2.63	2.33					
Urban	1.16	.64	1.96	.78	1.15					
Rural, farm	4.43	(1/)	3.43	4.01	(1/)					
Rural non-farm	2.80	3.68	1.73	3.17	2.38					

1/Omitted because of insufficient sample size for one or both seasons.
2/One or both seasons less than 0.005 days per person.

meaning that young rural males continue to go hunting into middle life. Even the rate for rural males over 65 is quite high, 2.5 occasions per person for the 6-month period. For females, by size of place of residence and age, the data show only a higher participation rate among females in rural areas. Even so, rural female participation is quite minimal.

The association between hunting and income is negligible. If anything, participation is somewhat higher in the lowest income class and the highest income class, and lower between them. This nationwide pattern is reproduced in the South, but in the Northeast participation appears to decrease as income increases. None of these differences are very large.

If financial ability were a significant factor in the decision to hunt, one would expect it to be demonstrated by the joint distribution of days per person hunting by family income and size of place of residence. However, such is not the case. Persons in higher income brackets who live in largest cities, furthest removed from hunting areas, hunt very little. In cities 50,000 to 1 million, peak hunting rates are the highest income group and the group earning $6,000 through $7,999 annually. Within small cities (under 50,000) hunting rates increase to the group earning $10,000 and more, when apparently the rate declines considerably. This increase is from 0.6 days per person for the income group under $1,500 to 3.36 days per person for the $8,000 to $9,999 group. Finally, persons living in rural areas participate more in hunting if they are at the extremes of income distribution and less if in the middle.

The heavier hunting of the lower income groups most probably represents hunting primarily for food rather than chiefly for sport. The combination of the high rate for the highest income group (5.31 days per person) in rural territory, with the relatively high rate in the rural SMA population, even in the Northeast, suggests that these hunters are suburban sportsmen.

Table 8. Hunting days per person by socioeconomic characteristics for region and size of place of residence, September-November 1960 combined with December 1960-February 1961

Socioeconomic characteristic	Days per person									
	United States	Northeast	North Central	South	West	All	SMA over 1 million	SMA under 1 million	Urban, not in SMA	Rural in and out of SMA
Family income:										
Less than $1,500	2.07	0.98	0.25	3.07	2.74	1.73	0.16	0.40	0.60	3.02
$1,500 to $2,999	1.48	1.35	1.13	1.90	.83					
$3,000 to $4,499	1.48	1.27	1.97	1.66	.55	1.48	.11	.35	.81	2.80
$4,500 to $5,999	1.45	1.00	1.76	1.77	1.24	1.45	.31	.60	1.50	2.91
$6,000 to $7,999	1.44	1.14	1.72	1.63	1.05	1.44	.49	1.43	1.40	2.25
$8,000 to $9,999	1.46	.69	1.90	1.96	1.06	1.46	.25	.65	3.36	2.88
$10,000 to 14,999	1.37	.69	2.05	1.30	1.03	1.37	.21	.88	.55	3.22
$15,000 and over	2.23	.44	1.76	(1/)	(1/)	2.23	.08	2.64	(1/)	5.31
Education, age 25 and over	1.21	.65	1.26	1.68	1.03					
4 years or less	1.32	2/.02	2.03	1.88	(1/)					
5 to 7 years	1.39	.41	.96	2.32	1.20					
8 years	1.01	.93	.97	1.29	1.03					
High School 1 to 3 years	1.35	1.17	1.34	1.54	1.41					
4 years	1.04	.54	1.56	.93	1.11					
College; 1 to 3 years	1.47	2/.28	1.02	3.14	.60					
4 years or more	1.09	.58	1.20	1.17	1.13					
White	1.52	1.12	1.67	1.97	.99	1.52	.27	.87	1.23	2.73
Nonwhite	1.64	2/.02	2/.27	2.38	2.65	1.64	.16	.44	.72	4.44

1/Omitted because of insufficient sample size for one or both seasons.
2/One or both seasons less than 0.005 days per person.

In considering occupation, one finds that days per person hunting ranks occupations almost in reverse order of occupational prestige. For example, the occupations array themselves as follows: farmworkers (4.7), laborers (2.9), skilled workers (2.3), managers (2.0), professional (1.0), white collar (0.7), service (0.7). Except for the last two occupations, the sequence is fairly suggestive of increasing occupational prestige. This rank order is consistent in each region.

As one would expect, all occupations participate more heavily if they reside in rural areas. Service workers, unless they live in rural territory, participate very little. Most other occupations appear to increase in hunting as their place of residence becomes more rural. In the case of laborers, participation is fairly high, even for those living in cities 50,000 to 1 million.

The participation rate by color for the United States as a whole shows only slightly greater participation by nonwhite over white (1.64 for nonwhite compared with 1.52). Nonwhite groups in the South and West participate more than corresponding white groups. The discrepancy is much greater in the West. Conversly, in the Northeast and North Central States white participation is much greater than nonwhite. In fact, nonwhite participation is quite low in the Northeast. Nonwhites living in rural territory participate considerably more than whites in rural territory, but in other areas whites participate at higher rates than nonwhites within the residence group. So far as size of place of residence is concerned, however, the rate of participation for both groups increases as one moves from the large cities to rural areas.

Among the population 25 years of age and over, there is no significant association of years education and hunting.

Hunting and impairments

Limiting impairments apparently restrict hunting, but impairments which are not considered limiting have no effect on hunting. The rate in days per person during the 6-months period September 1960-February 1961, for persons with impairments which are not limiting (1.65) is almost the same as those with no

Table 9. Hunting days per person by socioeconomic characteristics for region and size of place of residence, September-November 1960 combined with December 1960-February 1961

Socioeconomic Characteristic	Days per person									
	United States	Northeast	North Central	South	West	All	SMA over 1 million	SMA under 1 million	Urban in SMA	Rural in and out of SMA
All employed, 14 and over	1.90	1.23	1.79	2.70	1.47	1.90	0.29	1.17	1.34	3.66
Professional, technical, and kindred workers	.99	.56	.99	1.60	.61	.99	2/.01	.73	.94	2.22
Managers, officials, and proprietors, except farm	1.98	1.14	.78	3.43	.93	1.98	.60	1.05	(1/)	3.63
Clerical and sales workers (other white collar)	.71	.26	.75	1.24	2/.45	.71	2/.01	.49	1.05	1.54
Craftsmen, foremen, and kindred workers	2.34	1.57	2.78	2.90	1.49	2.34	.53	1.80	(1/)	4.37
Operatives and kindred workers, laborers	2.86	2.64	2.37	3.58	3.34	2.86	.41	2.63	2.37	4.87
Service workers (including private)	.69	.07	1.20	.75	(1/ 2/)	.69	.39	.38	.32	1.56
Farmworkers	4.71	(1/)	4.16	5.67	(1/)	4.71	(1/)	(1/)	(1/)	4.92

1/Omitted because of insufficient sample size for one or both seasons.
2/One or both seasons less than 0.005 days per person.

Table 10. Hunting days per person for health and impairments by age, September-November 1960 combined with December 1960-February 1961

Characteristics	Days per person				
	All	12-17	18-44	45-64	65 and over
All classes	1.53	2.79	1.68	1.08	0.50
No impairments	1.62	2.81	1.67	1.19	.50
Impairments not limiting	1.65	2.52	2.27	.48	(1/)
Limiting impairments	.69	2.52	1.43	.56	.31
State of Health—Male	3.02	5.31	3.31	2.04	1.11
Excellent	3.70	4.52	3.81	2.52	(1/)
Good	2.55	6.05	2.65	1.66	.59
Fair	2.80	(1/)	3.59	2.10	1.03
Poor	1.82	(1/)	(1/)	1.79	1.90
State of Health—Female	.18	.19	.22	.19	(2/)
Excellent	.14	.25	.13	2/.11	(1/ 2/)
Good	.22	.13	.34	2/.07	(2/)
Fair	.20	(1/)	2/.04	.44	(2/)
Poor	.11	(1/)	(1/)	.18	(2/)

1/Omitted because of insufficient sample size for one or both seasons.
2/One or both seasons less than 0.005 days per person.

impairments (1.62). Neither do impairments limit hunting among those aged 18 to 44, but among those 45 and above, the presence of impairments restricts hunting.

By state of health, only data for males are adequate for study. It shows a decrease in the rate of hunting per person as health is assessed excellent to poor. Moreover, those rating their health as poor hunt only about one half as often as those who rate their health as excellent. As a matter of fact, in the age group 65 and over, hunting is more frequent among those who rate their health as poor than among those who rate their health as excellent to fair. The latter data are subject to sampling variation to a greater extent than the remainder of the table, but the rate of hunting among those who say that their health is fair or poor is higher than one would expect from examining some of the more active sports. Apparently, hunting is an activity in which one may engage at his own rate of speed, and devotees find ways to engage regardless of poor health.

Hunting, then, is largely a male sport. It is highly associated with the rural-urban continuum, and residence more than income, appears to affect participation. Members of less prestigeful occupations appear to participate more than higher status occupations, but this too is affected by size of place of residence. Nonwhites participate heavily if they live in rural areas or in the South or West. Limiting impairments restrict hunting among males, and so does poor

health. With these regional, color, occupational, health and age-sex associations, hunters have a number of unique characteristics.

Hunting and mobility

Table 11 shows the days per person hunting by present and previous region. Previous region is defined as the last region from which the individual moved if the move occurred during the past 10 years. The rates in parenthesis are for the segment whose present and previous region is the same, that is, they have not moved between regions within 10 years. For example, those who have remained in the South have a participation rate of 2.34 days per person hunting during the 6-month period. Those who moved from the South to the Northeast have a participation rate of 0.88, while those who moved to the North Central States have a rate of 1.16. Those who moved from the West (1.31) appear to gain if they move to the South (2.48), but lose if they move to the North

Table 11. Hunting days per person during the 6-month period September 1960-February 1961, by present and previous region (up to 10 years previous)

Previous region	Days per person—present region				
	United States	North-east	North Central	South	West
All	1.53	1.03	1.58	2.04	1.09
Northeast	.98	(1.07)	1.04	.09	[2]/1.14
North Central	1.50	1.12	(1.71)	.76	.94
South	2.01	.88	1.16	(2.34)	.58
West	1.40	([1]/ [2])	.97	2.48	(1.31)
Same region:					
Same State	1.89	1.08	1.81	2.68	1.74
Different State	1.28	1.06	1.36	1.57	.81

[1]/Omitted because of insufficient sample size.
[2]/Less than 0.005 days per person.

Source: Tables 2.05.11 and 3.05.11.

Central area (0.97). However movers from the Northeast and North Central regions to the South appear to lose in participation levels, as well as those who move from the North Central to the West. Migrants undoubtedly represent unique age, occupation, and residence characteristics. One would expect the Northeast to South migrants to include many retirees as well as migrants from Northeast and North Central States to the West. Conversely, migrants from the South to the Northeast and North Central might be expected to be in younger ages. These possibilities, for which no evidence is directly available from this survey, suggest that migrants who move to retire do not resume the hunting habits of their youth in large numbers, even though an opportunity exists. On the other hand there is some evidence that younger migrants assume the hunting participation rate of the area into which they move.

During the fall, 22 percent of the population say they prefer hunting (first, second, and third preferences), and 16 percent express a preference for hunting in the winter. This places hunting among the top five in preference for winter and among the top three for fall. This preference order is higher than one would expect from the percent participating. In relation to the actual percent participating (13 percent in the fall and 11 percent in the winter), hunting (along with fishing) exhibits a strong unmet demand. One must except ice skating and snow skiing—winter sports exhibiting the strongest preference in relation to the actual participants during the winter (tables 2.12 and 3.12).

Of the 22 percent who indicated hunting as a preference during the fall, 14 percent mentioned hunting as their first choice, 6 percent as the second, and 2 percent as the third. The first figure (14 percent) is larger than any other fall activity, indicating that commitment among hunters is high. This is shown, also, by the high relationship between the number of days participating and preference for hunting (table 2.12).

More frequent hunting is associated with larger proportions expressing a preference for fishing and camping. Except for horseback riding, participation in hunting is negatively associated with preferences for almost all other activities (table 2.12).

For the winter period, 16 percent express a preference for hunting (first, second, and third choices), and a pattern similar to the above is observed. Participation in hunting is highly associated with preference for fishing and horseback riding, but the percentage expressing a preference for camping is too small to exhibit any relationship at all. Conversely, participation in hunting is negatively associated with a number of factors, including sightseeing and others. Thus, hunters express quite clearly defined outdoor preferences. Their liking for fishing, camping, and horseback riding uniquely defines their resource needs (table 3.12).

Reasons for not hunting

For the fall period, 4 percent of the population would like to engage in hunting but do not for some reason. Except for playing outdoor games (6 percent), the percentage who would like to engage in hunting but do not is larger than for any other fall activity. This is not true in the winter, however, when the winter sports (ice skating, snow skiing), find much larger proportions who desire to engage but do not for some reason (tables 2.16 and 3.16).

In the fall the most frequently given reason for not going hunting more often is a lack of time, 39 percent so mentioning. But other factors are mentioned often, also. Sixteen percent mention factors associated with ability to hunt, 13 percent indicate a lack of finances, while 10 percent say they don't have the necessary equipment. Only 8 percent report that "facilities" are too crowded, inadequate, or too distant for them to use. In the winter, the same relative ranking of these factors results: time is most frequently mentioned and ability next.

More time to hunt, knowledge of how to hunt and possession of the necessary equipment, then, appear to be critical for hunting. Unsatisfactory or unavailable facilities are not mentioned often by this group, 88 percent of whom know and use hunting facilities of some kind (tables 2.16, 3.16, and 2.12).

The median income of those who hunt as freely as they would like is $3,900 (table 1.15). Those who feel a time or financial restriction on their hunting participation have a median income of $400 more than this amount. This reflects hunting experience during the summer when very little hunting activity takes place. Since it is based upon less experience, it is less reliable.

The preference table for the first survey, reflecting the summer experience shows that hunting is a preferred summer activity for 10 percent of the population (table 1.17). As might be expected, this preference is expressed far more frequently by rural inhabitants than those living in other areas (18 percent so expressing for rural areas outside of SMA's and 11 percent among rural persons in SMA's). The percentage preferring hunting is greatest in the South (14 percent) and least in the Northeast (5 percent). Preference for hunting is exclusively a male attitude, 19 percent of males so expressing, compared with only 1 percent among females. Summer preferences for hunting are related to years of schooling, the rate declining as education increases. This, of course, concerns only those 25 years of age or more (table 1.19).

Summertime preferences for hunting on vacation, weekend trips, day's outing, or for 2 or 3 hours, are quite low, only 1 percent, and hence, insufficient for study (table 1.21).

Hunting leases

The survey ascertained whether the respondent "during the last 12 months . . . had hunting rights on someone's property under a purchase or lease arrangement?" As is shown in table 12, approximately 1 percent of the population 12 years of age and over owned a hunting lease during the period. This percentage is estimated from combined data from the second, third, and fourth National Recreation Surveys. This procedure combined data which refer to 12-month periods ending Dec. 1, 1960, Mar. 1, 1961, and June 1, 1961. Hence, the period of reference is not as satisfactory as might be desired, but may be considered as representing the 1960-61 hunting season.

Regionally, hunting leases are much more popular in the South (the area extending from Texas and Oklahoma through Delaware and Maryland) than other regions. There are approximately 20 persons with leases per thousand population 12 years of age and over in the South, compared with approximately 5 per thousand in the Northeast and North Central regions, and 7 per thousand in the West.

Using the estimate of hunters made for the calendar year 1960 by the 1960 National Survey of Fishing and Hunting, one may relate the estimated number of hunters with leases to the estimated number of hunters. There are approximately 88 hunters with leases per thousand hunters. This figure varies from a low of 38 in the North Central States to 149 in the South, as is shown by table 12. Altogether, it is estimated that there are 1,287,000 hunters who held leases in effect during part or all of this period.

The tenure of leases vary, as shown by table 13. For big game, the most popular type of lease is 1-5 months, 42 percent so reporting. However, 18 percent report periods of less than 1 month and 16 percent, periods of 6 years or more. Most leases for small game and waterfowl are for periods of less than 1 month (34 percent). However, large proportions (26 percent) are for periods of 1 to 5 years, inclusive. The column showing small game and waterfowl leaseholders distributed by length of time reflects primarily the small game leases, as may be inferred from table 14.

Table 14 shows the distribution of all leases reported according to whether they were concluded by a single individual or by the respondent in association with others. The table shows that about three-fourths of all hunting leaseholders report group leases. Table 14 also shows that about one half of all reported are for hunting big game.

In group leases, more than two-thirds are arrangements which involve the respondent and four or more persons. This type of lease was the most frequent for both big game and small game hunting. These percentages are shown for group leases in table 15. Because of group leaseholding, the data presented here must be interpreted as leaseholders, rather than leases, for the data contain an unknown number of duplicate reports.

Table 12. Estimated number of persons with hunting lease, and per capita hunting leases held "during last 12 months," by region

National Recreation Survey

Persons with hunting lease	Region				
	United States	North-east	North Central	South	West
Number (add 000)..	1,287	170	180	792	145
Per 1,000 population 12 years and over	10.09	4.88	4.87	20.35	7.07
Per 1,000 hunters .	87.9	75.9	38.4	149.3	60.4

Note: Estimates of hunters from the "1960 National Survey of Fishing and Hunting," p. 52.

Table 13. Percent of hunting leaseholders with leases held "during last 12 months," by length of lease and type of game

National Recreation Survey

	Total	Big game	Small game and waterfowl
Total	100	100	100
Less than 1 month..	25	18	34
1-5 months inclusive	31	42	18
6-11 months, inclusive	10	14	4
1-5 years inclusive	17	10	26
6 years or more	17	16	18

Table 14. Percent of hunting leases held "during last 12 months" according to type of game by whether lease is single individual or group

National Recreation Survey

Type of game	Total	Single	Group
Total	100.0	23.6	76.4
Big game	49.6	5.7	43.9
Small game	42.3	14.6	27.6
Waterfowl	8.1	3.2	4.9

Table 15. Percent of group hunting leases held "during last 12 months" by type of game and number of other joint leaseholders

National Recreation Survey

Type of game	Number of other persons in lease					
	Total	1	2	3	4 or more	No answer
Total	100	1	11	16	67	5
Big game	54	1	6	4	43	0
Small game	37	0	5	8	21	3
Waterfowl	7	0	0	3	3	1
No answer	2	0	0	1	0	1